HURRICANE AT MARTINIQUE, AUGUST, 1903.

The following account of the passage of this hurricane over Martinique is communicated by Dr. A. Lahille, chemist in charge of the meteorological observations for the chief of the sanitary service at the Military Hospital at Fort de France:

During the night of August 8–9, 1903, a cyclone coming from the northeast–north–northwest, passed over Martinique.

The barometric pressure which, with numerous oscillations, had fallen during the day of the 8th, had nevertheless remained as high as 758 millimeters, or above, until about 9 p. m. From that time, however, the pressure fell rapidly and reached its minimum, 728 millimeters at 12:30 a. m. From 12:30 to 12:45 a. m. a relative calm succeeded, corresponding to the passage of the center of a cyclone. At 12:45 the hurricane recommenced blowing from the south–southeast. August 9, at 2:30 a. m., the pressure was 753 millimeters, and at 4 a. m., 756 millimeters. The amount of rain which fell during the night from 8 p. m. to 8 a. m. was 160 millimeters.

The maximum velocity of the wind, as recorded by the anemometer, was 35 meters per second.

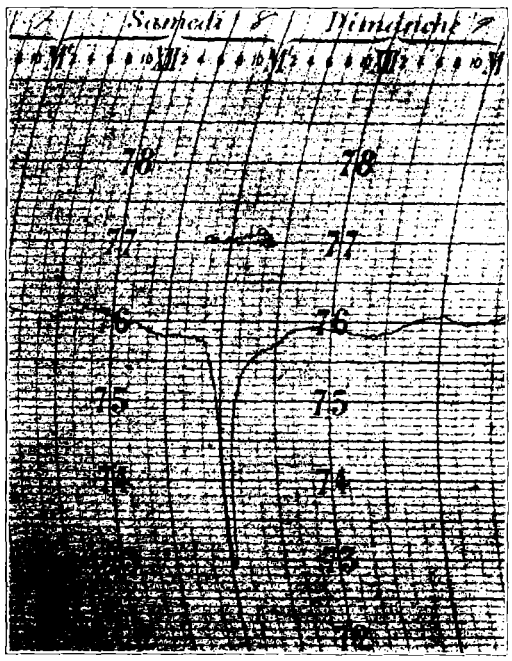

FIG. 1—Barogram from the Richard barograph, large model, at the meteorological station, Military Hospital, Fort de France, during August 7, 8, 9, 1903. The time scale probably relates to local mean time.

THE RESIGNATION OF H. SOWERBY WALLIS.

It is well known to meteorologists that the great system of rainfall stations and publications, known as the British Rainfall, was organized by Mr. G. J. Symons, and that at his death he left his house and other property as an endowment for the permanent continuation of this important work. His assistant, Mr. H. Sowerby Wallis, was designated by him as his successor, but we regret to learn that it has become necessary for him to retire. Under date of September 1, 1903, Mr. Wallis sends the following letter to the Editor:

DEAR SIR: After thirty years association with my late friend, G. J. Symons, in the development of the rainfall organization, by his desire, I took up the burden of his work with grave misgivings that my health would not long support the strain.

Frequent illness now prevents me giving it continuous attention, and for me to remain in charge could only be a source of weakness. I therefore feel that the time has come for me to pass on the control of the work, and I am glad that so able a successor as Dr. Mill is ready to take up the onerous task. I am handing over to him all the records and instruments, and leaving this house, that he may continue the organization, without a break, at the old address.

Dr. Mill had devoted much attention to rainfall, and for three years we have conjointly carried on the work while he acquired that intimate knowledge of detail so essential to ensure continuity on the lines approved by experience.

In thus taking leave, while naturally regretting the termination of a life long labor with which many pleasant memories are associated, I would congratulate the nation on possessing a body of private individuals who have, for nearly half a century, kept up a national work of the first importance, and who may be trusted to maintain it in perpetuity.

Yours, very truly,

H. SOWERBY WALLIS.

RETIREMENT OF PROFESSOR NEUMAYER.

We learn that Prof. George von Neumayer, director of the Deutsche Seewarte at Hamburg for many years past, has been retired on account of advanced age and ill health, and that Captain Herz, of the imperial navy, has been appointed his successor with the rank of rear admiral. The Seewarte has hitherto been distinguished for its devotion to the scientific aspect of meteorology, while not neglecting the practical applications. It has in fact introduced so much accuracy into the magnetic, meteorologic, and geographic work of the German Navy that it may be said to have demonstrated that science is eminently practical, and that the highest science must be assimilated by the navigator if he would do his own special work in the most satisfactory manner. With such an eminent scientific man as von Neumayer at its head the Seewarte has been an inspiration to German navigators.

Our contemporary, Nature, states that the appointment is explained on the theory that a man of science at the head of the executive office is so overburdened with administrative work that he has no time for scientific investigation. But one might as well say that a practical man at the head of a large office is liable to be so overburdened that he has no time for his private affairs. The whole question is simply one of organization. The chief of a bureau may so select his subordinates, assign their duties, and economize his own time as to find opportunity for any special personal work that he is specially qualified to perform. Men of energy and business ability are to be found among scientific men quite as frequently as among military officers, at least this is the experience in England and America. All modern arts, including the art of war, are applications of modern science, and as a general rule the practical scientist is a safe leader.

LOCAL STORM IN BALTIMORE, MD.

Mr. Edward O. Easton, Observer, temporarily in charge of the station at Baltimore, Md., reported, on July 14, on the storm of Sunday, July 12, in that city, from which we make the following extracts:

The time of the greatest damage appears to have been about three minutes after noon. No damage occurred in the vicinity of the office of the Weather Bureau, at the Johns Hopkins University, but a heavy thunderstorm was experienced there. There were two areas of extreme severity. The first, probably, in order of occurrence, embraced much of the 1700 blocks of Fulton avenue, Mount street, and Calhoun street, the second extended from Eager street and Broadway eastward for 6 blocks, and was from 2 blocks to less than a block in width, narrowing irregularly. In the first named area a funnel-shaped cloud was distinctly observed by a number of the residents, but no very definite account of its manner of formation was obtained. In the second district, where the damage was greatest, more explicit information was obtainable, of which the following is the substance: A heavy storm cloud approached from the northwest and another from the southwest; they apparently merged at Eager and Broadway, where the destruction abruptly began. The funnel-shaped cloud was seen by many, and a heavy roaring sound was followed by almost complete darkness as the storm burst. The upper cloud mass was distinguishable, however, with its narrowing extension downward, the latter appearing to lag slightly behind the mass above in its movement eastward. The whole traveled with almost incredible velocity (so it is stated) only a few seconds elapsing between the time the cloud descended to the housetops at Eager and Broadway until it rose into the air again 6 blocks to the eastward.

In both districts the nature of the destruction pointed clearly to the claims made that the city had been visited by a tornado. Some walls were blown outward, as though by sudden expansion of confined air

within, but fully as many fell inward. In one case the four walls bulged outward, and the roof lay within about half way down to the floor of the second story, while not far off roofs had been lifted high into the air and carried a block and a half away before being deposited in an alley.

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In all, several hundred houses were unroofed or otherwise badly wrecked. The money loss has been estimated at $200,000.

ILLNESS OF PROF. ALFRED J. HENRY.

The students of the daily weather map were quite puzzled on October 7 to find that Professor Garriott had succeeded Professor Henry as forecaster for the month of October. Inquiry revealed the fact that in consequence of a sudden affliction of the eyes Professor Henry had been taken to the University Hospital for treatment for "displacement or falling of the retina of the left eye." We are happy to add that he is improving and that there is good reason to believe that he will return to duty in a month or six weeks.—*C. A.*

NOTES UPON ECONOMICAL SHAPES FOR CUTTING ENVELOPES OF BALLOONS.

Referring to Professor Marvin's article under the above heading in the MONTHLY WEATHER REVIEW for July, 1903, a casual examination of fig. 4, page 315, might lead one to assume that the outline of the end gores of a 15-gore field of the "baseball" type is determined by a circle having for its center the projection of one of the poles p_1, p_2, p_3, p_4, and for its radius half the length of one of the central gores. The point of projection of these poles is at the center of the third gore from the end of the field.

A little consideration will show, however, that such a determination of the outline would not be correct, since the adjacent edges of any two gores must be of equal length, and this length, in degrees of a great circle, is $90° - b$, where

$$\sin b = \sqrt{(\sin 45°)^2 + (\sin 45° \tan a)^2},$$

and a is the distance in degrees from the pole to the point through which the length of any meridian of the gore is to be measured.

The data for the lengths of the edges and central meridians of the gores that fall outside the poles in a 15-gore field is as follows:

(a). Distance from pole.	$90° - b$.	Length of gore in percentage of length of central gore.
°	° ′	
9	44 17	98.4
18	41 58	93.3
27	37 29	83.3
36	29 0.7	64.5
45	0 0	0.0

H. H. K.

CORRIGENDA.

In the MONTHLY WEATHER REVIEW for July, 1903, p. 316, column 2, line 16, make "$\frac{14.007\pi^2R^2}{10}$" read "$14.047\pi R$."

On the same page in fig. 7, for "80° 24′ 10″" read "83° 24′ 10″;" and for "89° 7′ 36″" read "87° 7′ 36″."

THE WEATHER OF THE MONTH.

By Mr. W. B. STOCKMAN, District Forecaster, in charge of Division of Meteorological Records.

PRESSURE.

The distribution of mean atmospheric pressure is graphically shown on Chart IV and the average values and departures from normal are shown in Tables I and VI.

The mean barometric pressure was high over the eastern half of the country and on the north Pacific coast, with the highest reading 30.05 inches in southwestern Washington. The readings were low over the middle and southern Plateau regions, with a minimum mean of 29.72 inches at Yuma.

The mean pressure was above the normal in New England, the eastern parts of Pennsylvania and New York, western Kentucky, southern Tennessee, parts of the Gulf States, lower Missouri and upper Mississippi valleys, parts of the northern and middle slope regions, eastern North Dakota, northwestern part of the upper Lake region, and on the immediate coast of Washington, Oregon, and northern California; elsewhere the mean pressure was below the normal.

The pressure diminished from that of July, 1903, in the Pacific States, the Plateau regions generally, the Gulf and South Atlantic States, central Mississippi Valley, and the Ohio Valley and Tennessee.

TEMPERATURE OF THE AIR.

The distribution of maximum, minimum, and average surface temperatures is graphically shown by the lines on Chart VI.

The mean temperature was above the normal in the middle Plateau and slope regions, generally over the southern half of the country, excepting on the Pacific coast and in portions of southeastern Texas. Over North Carolina, southeastern Tennessee, northwestern Texas, New Mexico, eastern Arizona, north-central Utah, and north-central Colorado the departures averaged between +2.0° and +3.5° per day. As a rule the departures in the region where the temperature was below the mean were more marked than the plus departures, averaging from −2.0° to −6.4° per day from Montana, South Dakota, and Nebraska eastward to the Atlantic Ocean. The greatest deficiencies in temperature were reported from New England, eastern New York, and about western Lake Superior.

The average temperatures for the several geographic districts and the departures from the normal values are shown in the following table:

Average temperatures and departures from normal.

Districts.	Number of stations.	Average temperatures for the current month.	Departures for the current month.	Accumulated departures since January 1.	Average departures since January 1.
		°	°	°	°
New England	8	62.4	− 4.4	+ 4.4	+ 0.6
Middle Atlantic	12	70.9	− 2.4	+ 7.8	+ 1.0
South Atlantic	10	79.6	+ 1.7	+ 4.7	+ 0.6
Florida Peninsula*	8	82.9	+ 1.5	+ 6.0	+ 0.8
East Gulf	9	81.0	+ 1.5	− 6.7	− 0.8
West Gulf	7	80.9	+ 0.3	−10.2	− 1.3
Ohio Valley and Tennessee	11	75.4	+ 0.5	+ 3.2	+ 0.4
Lower Lake	8	66.8	− 2.6	+ 7.7	+ 1.0
Upper Lake	10	63.0	− 3.0	+10.9	+ 1.4
North Dakota*	8	63.9	− 2.5	+ 2.0	+ 0.2
Upper Mississippi Valley	11	71.0	− 1.7	+ 5.0	+ 0.6
Missouri Valley	11	71.8	− 1.2	+ 1.9	+ 0.2
Northern Slope	7	67.5	− 0.3	− 1.1	− 0.1
Middle Slope	6	75.5	+ 0.9	− 4.9	− 0.6
Southern Slope*	6	80.3	+ 1.6	− 9.0	− 1.1
Southern Plateau*	13	77.4	+ 0.7	−11.3	− 1.4
Middle Plateau*	8	69.9	− 0.4	−20.6	− 2.6
Northern Plateau*	12	67.4	− 0.4	+ 1.7	+ 0.2
North Pacific	7	60.8	− 0.6	− 3.5	− 0.4
Middle Pacific	5	63.4	− 1.3	− 8.6	− 1.1
South Pacific	4	70.9	− 0.6	− 5.5	− 0.7

* Regular Weather Bureau and selected voluntary stations.

In Canada.—Prof. R. F. Stupart says:

The temperature was below the average throughout the Dominion from the Pacific to the Atlantic oceans. The largest negative departures, amounting to from 3° to 6°, were recorded in Ontario and Quebec. In the Maritime Provinces they were from 3° to 4° below, British Columbia and the Northwest Territories from 2° to 4° below, and in Manitoba, Lake Superior, and the northern portions of Ontario from 1° to 2° below.